



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,746	11/25/2003	Jae Chul Ryo	9988.084.00-US	3108
30827	7590	12/20/2006	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP			RIGGLEMAN, JASON PAUL	
1900 K STREET, NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20006			1746	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/20/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/720,746	RYO, JAE CHUL	
	Examiner Jason P. Riggleman	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-5 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 25 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | Paper No(s)/Mail Date. ____                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: ____                           |

## **DETAILED ACTION**

### ***Drawings***

1. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in paragraph [0011] of the application specification, is detailed a method in which the temperature is sensed prior to a final draining step. In paragraph [0022], is detailed a method in which, prior to draining the tub on the final cycle, with water still in the tub, the water temperature is sensed in a step S408. This is contrary to the claimed invention, see claim 1, which senses the temperature of the drained water (after water has drained from the tub). It is requested the applicant amend the specification to support the claimed subject matter.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how a predetermined temperature includes a plurality of referential water temperatures. It is unclear how a reduced speed includes a plurality of correspondingly limiting dewatering speeds. For instance, the predetermined temperature could be an average of several referential water temperatures; however, the machine could instead be capable of being programmed with different predetermined temperatures which are drawn from a reference manual which has a table for the proper rinse speed in relation to a given rinse water temperature. For purposes of examination, it is assumed to mean that the predetermined temperature is adjustable by the user. Also, it is assumed that each predetermined temperature is linked with a corresponding dewatering speed.

6. The term "normal" in claim 3 is a relative term which renders the claim indefinite. The term "normal" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being unpatentable by Billings et al. (US Patent No. 3078700).

8. Billings et al. teaches a washing machine control method comprising steps of supplying water to a tub for performing a final operational step, draining the water from the tub wherein the water temperature is sensed as it flows to the drain (Column 4, Lines 55-65). The washing machine has provisions for a variable temperature responsive system – a system which may be preset for the fabric to be washed and which will automatically prevent the spinning of the fabric so long as the temperature of the fabric remains above a particular (predetermined) threshold temperature (Columns 3-4, Lines 69-75 and Lines 0-8, respectively). The temperature of wet fabric below which centrifuging will not cause “set-in” wrinkles is called the threshold temperature. The machine has a normal dewatering speed limited to 1,000 rpm (either 330 rpm or 850 rpm) and a reduced dewatering speed limited to 700 rpm (of zero rpm) (Column 7, Lines 0-12). Billings et al. teaches the predetermined temperature includes a plurality of referential water temperatures (is adjustable according to a reference temperature specific to the fabric type) (Column 3, Lines 69-75).

9. Claim 5 is rejected under 35 U.S.C. 102(b) as anticipated by Billings et al. (US Patent No. 3078700) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Billings et al. (US Patent No. 3078700), as applied to claims 1-2, and further in view of Tanaka et al. (US Patent No. 5133200).

**10.** Billings et al. teaches the predetermined temperature includes a plurality of referential water temperatures (is adjustable according to a reference temperature specific to the fabric type) (Column 3, Lines 69-75). The reduced speed includes a plurality of correspondingly limiting dewatering speeds – (335 rpm and zero rpm).

**11.** In the alternative, Billings et al. does not teach a plurality of correspondingly limiting dewatering speeds; however, Tanaka et al. teaches that motor speed of the dehydrating operation may be determined based on the water temperature sensed in the rinse step (Column 6, Lines 5-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Billings et al. with Tanaka et al. to create a method for controlling the dehydrating of clothes whereby the sensed water temperature determines the motor speed of the dehydrating operation to create "wrinkle-free" clothing. It would have been obvious to one of ordinary skill in the art at the time of the invention to understand that Tanaka et al. teaches a method which encompasses multiple temperatures and multiple corresponding motor speeds for the dehydrating operation.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggleman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Riggleman  
Examiner  
Art Unit 1746

JPR



MICHAEL BARR  
SUPERVISORY PATENT EXAMINER